Trend Lines

Perspective on Utah's Economy

Labor Supply and Demand

March/April 2005

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Utah's Job Connection

TrendLines

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Rob is a Research Analyst working on the Job Vacancy Study. His responsibilities include data collection and analysis of job vacancy statistics. He is currently working on a Bachelor's of Science in economics with a minor in international studies at the University of Utah where he also competes as a sprinter on the track & field team.

Nate Talley

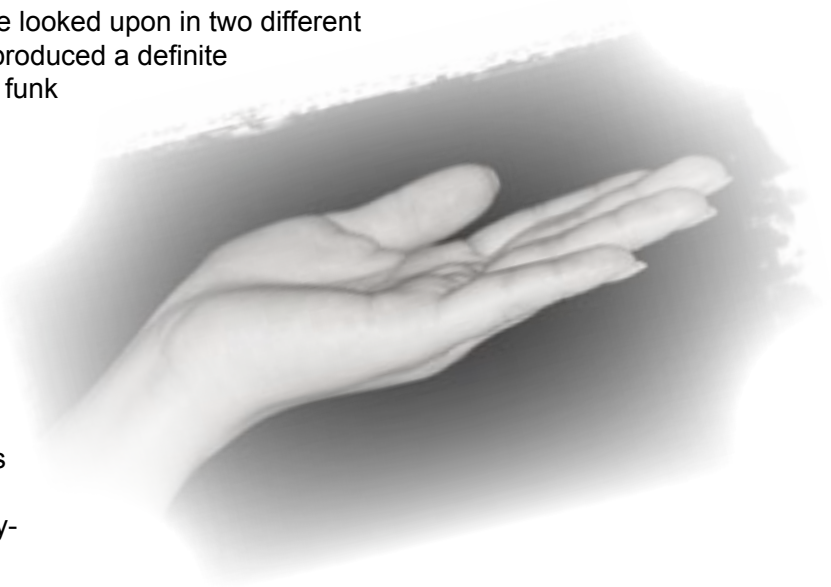
Nate joined the DWS team last August and was brought on exclusively to conduct the Job Vacancy Survey. He earned a Bachelor's of Science in Economics from the University of Utah and has enjoyed his experience collecting and analyzing data at DWS. Hailing from Cedar City, Utah, Nate played football for Southern Utah University before moving to Salt Lake City and attending the U of U.

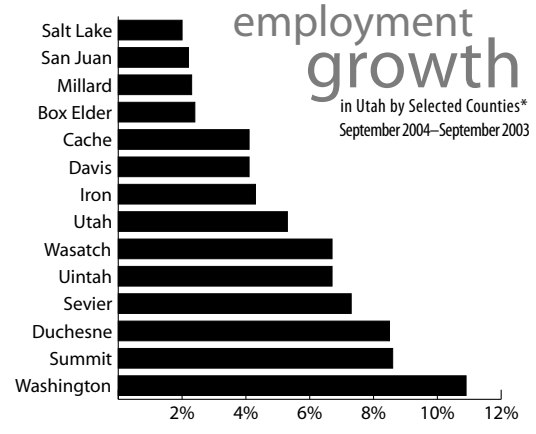
The Wasatch Front

Highlights

by Mark Knold

With 2004 now behind us, it can be looked upon in two different lights. On the one hand, the year produced a definite movement out of the recessionary funk Utah experienced over the three previous years. With employment growth around 2.6 percent, 2004 is noticeably better than the employment contraction year of 2002, and the no-growth of 2003. On the other hand, it is yet another year in which Utah's employment growth rate came in lower than its historical average of 3.3 percent. This makes 2004 the seventh straight year of lower-than-average employment growth.





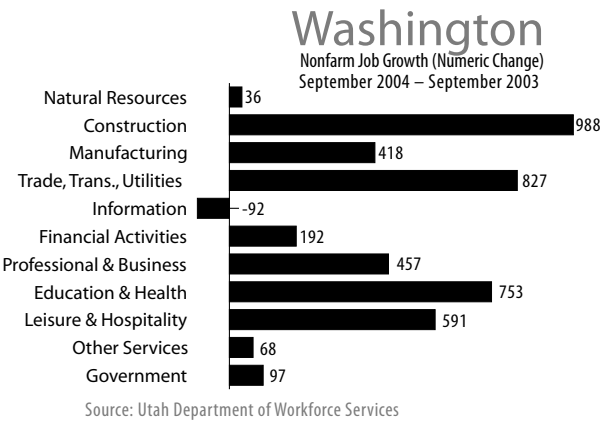
Source: Utah Dept. of Workforce Services

* Only counties with employment levels of 4,000 or more are included. Only the top 14 counties are shown.

The area that just hasn't sprung back to life is the Salt Lake County economy, although it is stirring. While many parts of the state have experienced a strong employment rebound, Salt Lake County remains an underachiever. Employment growth is looking like it will come in at only 1.3 percent for the year, whereas Utah County, in contrast, will see a growth rate of around 5.0 percent. That is a large contrast.

The Salt Lake County economy is improving, but it's taken until the third quarter of this year to see the gains. The county started the year still in negative numbers. By the third quarter though, employment growth had risen to 2.0 percent.

The strongest region in the state is Washington County. The latest available data from September reveals employment growth at 11 percent. That is an incredible amount of growth in just one year. The industry that has added the most new jobs is construction, with nearly 1,000 new jobs since September of 2003. The construction industry is not generally a driver of an economy, instead taking its cue from the rest of the economy. But in the case of Washington County, it is a driver.



Strong population growth is fueling housing construction, particularly in the St. George-Washington-Hurricane region. Locals tell us that a population surge coming out of the Las Vegas area is one of the primary factors driving this current growth. Housing prices in the Las Vegas area have risen by 50 percent in just the last year alone. People may be looking to keep their ties to the Vegas market but getting far enough away to escape its housing prices.

To follow the latest economic events:
http://jobs.utah.gov/wi/press/tlextra/tlextracurrent.asp

- ✓ **A group of Utah investors repossessed Elk Meadows ski area in southern Utah and hope to see it reopened. http://deseretnews.com/dn/view/0,1249,600101162,00.html**

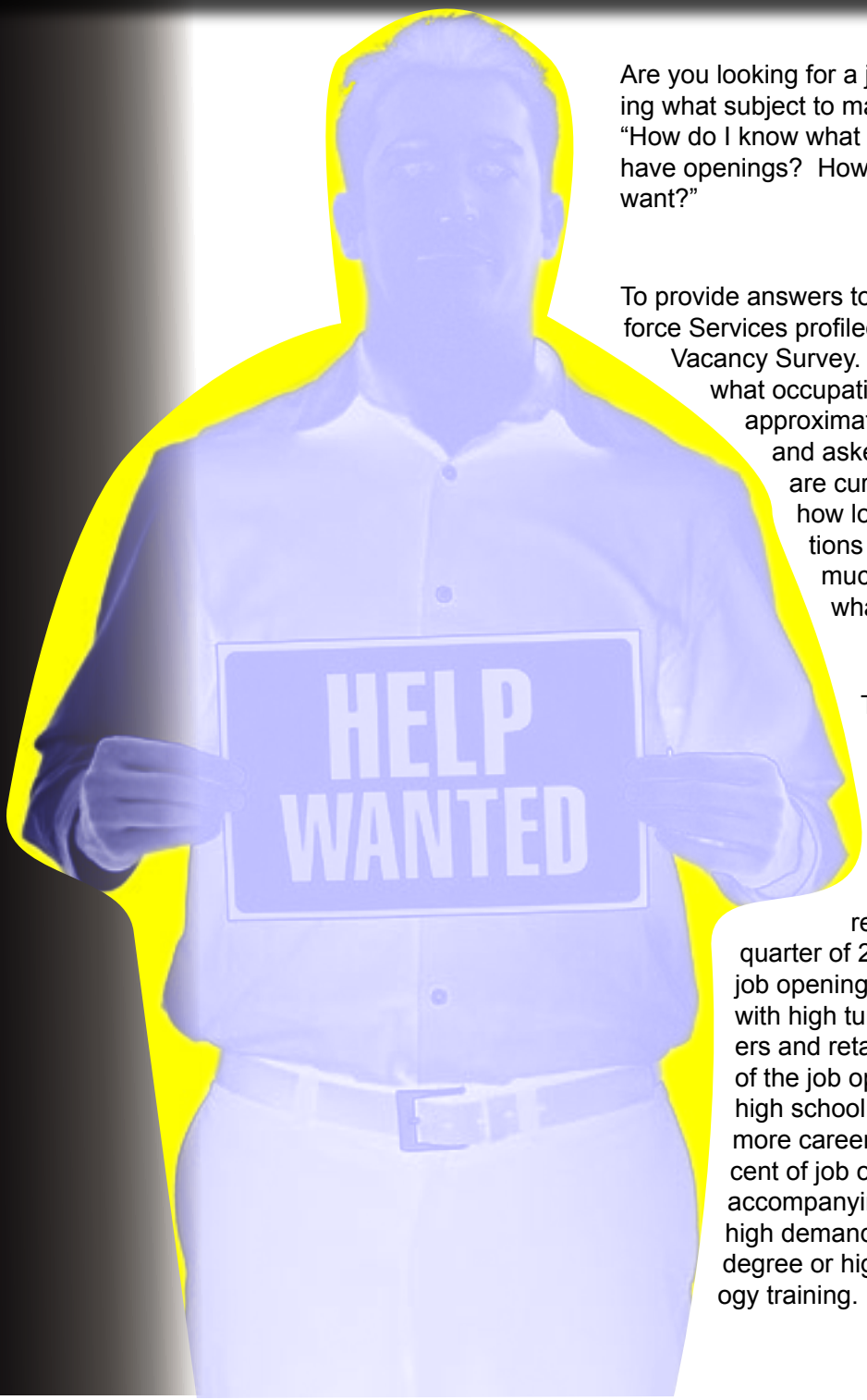
- ✓ **Utah is the nation's seventh-fastest-growing state with a population that rose by 1.6 percent over the past year. http://deseretnews.com/dn/view/0,1249,600099492,00.html**

- ✓ **Bankrupt Geneva Steel may claim a projected $90 million by selling its water rights, which should be enough water for the thousands of homes, businesses and light industrial facilities envisioned for the 1,700-acre Vineyard site. http://deseretnews.com/dn/view/0,1249,595113772,00.html**

A Profile of Job Openings in Utah

Job Vacancy Survey

By Mark Knold, Rob Stark, and Nate Talley



Are you looking for a job, planning a career path or even deciding what subject to major in? If so, you might be wondering, "How do I know what industries are hiring? Which occupations have openings? How much competition is there for the job I want?"

To provide answers to these questions, the Department of Workforce Services profiled Utah's job market by conducting a Job Vacancy Survey. To discover what jobs are "out there" and what occupations are in the most demand, we surveyed approximately 3,400 employers throughout the state and asked them to describe the jobs for which they are currently hiring. They responded by telling us how long the job had been vacant, what qualifications they expect from a job seeker, and how much they expect to pay this individual. Here's what we found:

The job vacancy rate for most metropolitan areas, including the Salt Lake Valley and surrounding locations, was approximately 2.1 percent. This means that there are about 2 job openings for every 100 people employed in this region. That translates into about 20,000 job openings in the region at any given time during the fourth quarter of 2004. As might be expected, most of the job openings consisted of lower-skilled occupations with high turnover rates, such as cashiers, telemarketers and retail salespersons. In fact, about 70 percent of the job openings required no education beyond high school. But for those of you who are interested in more career-oriented occupations, the other 30 percent of job openings are where the answers lie. The accompanying charts illustrate the metropolitan region's high demand occupations, which require a Bachelor's degree or higher, Associate degree, or Applied Technology training.

MetropolitanUtah

Openings requiring bachelor degree +

Occupation[1]	JVS Average wage[2]	Estimated number of openings	Estimated occupational employment	Vacancy rate
Loan Officer	$18.42	116	2810	4.1%
Financial Manager	$33.04	91	4240	2.2%
Comp Software Enginrs Systems Software	$32.26	80	3120	2.6%
Lawyers	$35.10	75	2930	2.6%
Sales Engineers	$31.48	64	950	6.7%
Medical and Clinical Lab Technologists	$17.10	52	1070	4.8%
Civil Engineers	$24.31	51	1270	4%
Accountants and Auditors	$19.54	48	5550	<1%
Financial Analysts	$31.15	36	770	4.7%
Medical & Health Services Managers	$30.95	35	1660	2.1%

[1] Wages are for job vacancies offered and do not represent the average wage of all employed persons. For Occupational Employment Statistics (OES) wage information access our website at http://jobs.utah.gov/wi/pubs/WnI/dwsdefault.asp

[2] Occupational descriptions are available online at http://jobs.utah.gov

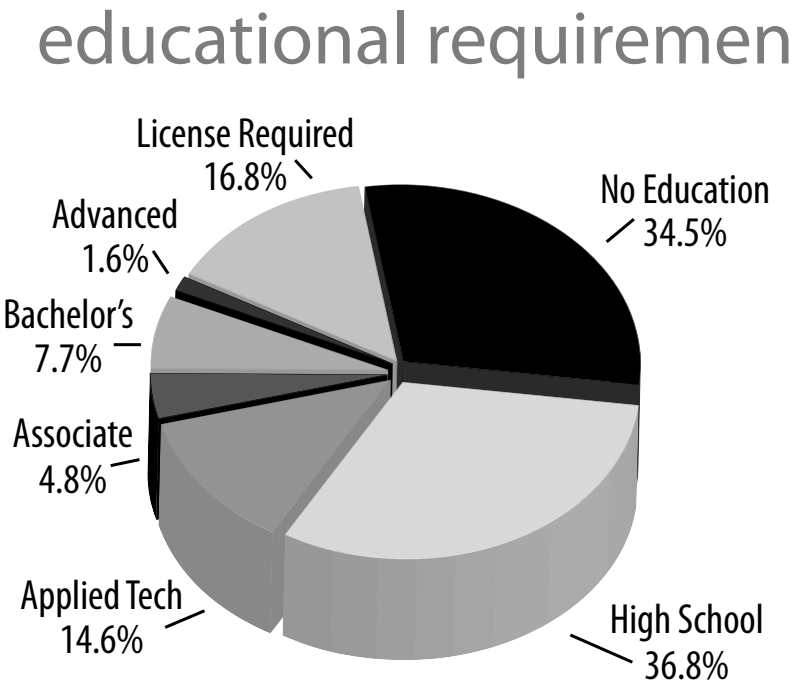
Openings requiring associate or applied technology degree

Occupation[1]	JVS Average wage[2]	Estimated number of openings	Estimated occupational employment	Vacancy rate
Registered Nurses	$20.65	509	11360	4.5%
Plumbers, pipe-fitters and steam-fitters	$16.48	253	4220	6%
Truck drivers, heavy and tractor trailer	$16.91	209	10740	1.9%
Carpenters	$11.89	117	8830	1.3%
Heating, air conditioning and refrigeration Mechanics	$19.05	103	1120	9.2%
Bus and truck mechanics and diesel engine specialist	$17.29	54	2260	2.4%
Automotive service technicians and mechanics	$14.96	51	5200	1%
Industrial machinery mechanics	$15.19	51	1370	3.7%
Vocational education teachers, postsecondary	$15.16	50	1230	4.1%
Licensed practical and licensed vocational nurses	$13.87	49	2120	2.3%

Registered nurses lead the pack among the most in-demand occupations in Utah and had the highest average wage among top occupations that usually require an Associate degree or Applied Technology training.

Of the top occupations that require a Bachelor's degree or higher, lawyers averaged the highest wage at $35.10 an hour. Financial managers were not far behind at $33.36 an hour.

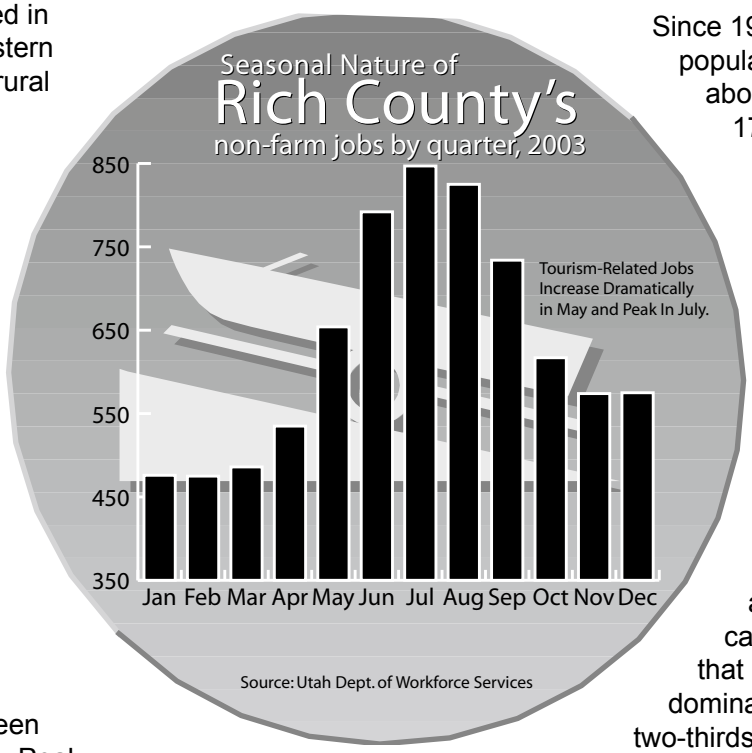
Are you an employer and want to know what the average offered wage is for an opening similar to one you're seeking to fill? Or want to know about Southwestern Utah's job vacancy situation? For comprehensive regional reports and complete Job Vacancy Survey results, access our website at http://jobs.utah.gov



RICH Highlight county

by John Mathews

Rich County is nestled in the extreme northeastern corner of Utah. This rural county bases it livelihood on agriculture (ranching), tourism, and government. Tourism and government together account for over half of all nonfarm jobs.



While the ranching activity is fairly stable over and through the year, the tourism business is not. Off-season employment averages between 480 and 580 workers. Peak season (the summer) employment counts run between 650 and 800, with the peak month being July.

Since 1990, Rich County's population has grown by about 20 percent, from 1728 to 2079 (2003). This population count makes the county one of the smallest in the state. Only Daggett and Piute Counties have fewer persons.

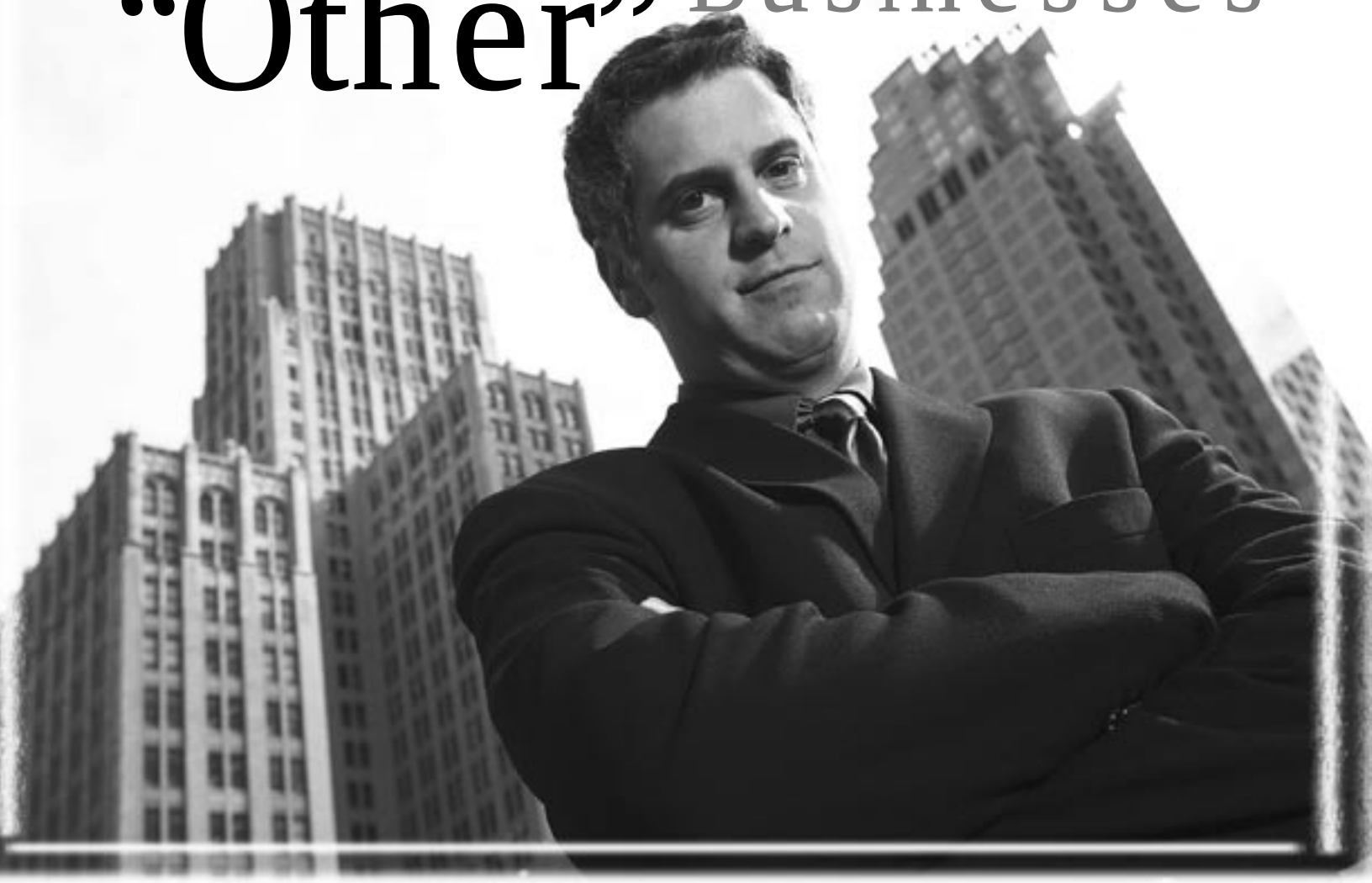
Economic activity in the area is geographically dichotomous in that agriculture/ranching dominates the southern two-thirds of the county and tourism- related business are in control the northern one-third, or "Bear Lake" area.

For more information about Rich County, check out:
http://jobs.utah.gov/wi/Regions/ north/rich/rich2.asp
"State, County and Local Information"

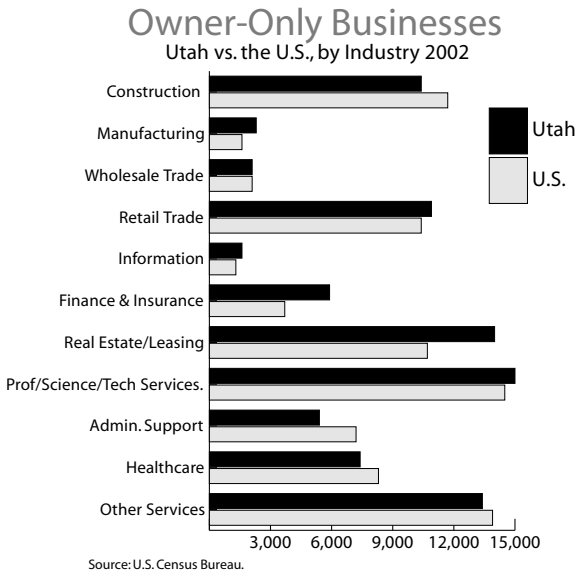
- ✓ **More persons commute out of Rich County to work in Wyoming than commute from Rich County to work in any or all other Utah counties. Two-thirds of Rich County workers work in Rich County.**
- ✓ **Of local lore, a monster of sorts, "the Bear Lake Monster," is purported to still inhabit the Lake. No one knows for sure, but there seems to be more sightings during the warm summer months when tourists abound.**
- ✓ **Rich County is one of the coldest spots in the continental U.S. Randolph and Woodruff are towns often named the coldest spot for any particular day in January.**
- ✓ **Cattle are the primary agricultural product in Rich County. In fact, there are 19 cows for every person. In addition, raspberry cultivation is very important around Garden City.**

Those Without Employees

The "Other" Businesses



by John Mathews



Typically when we talk about jobs we mean working for the "man." Most individuals who work, work for pay on a company's payroll. In Utah, about 1.1 million persons work for a paycheck. Another side to this working concept is the small business with just an owner(s) and no official employees. The number of business entities that don't have workers on their payrolls numbered 144,400 in Utah for 2002. That's twice as many as the 67,700 Utah worksites with employees. These 140,000 plus businesses – those with one or more owners but no paid employees – brought in over $6 billion in receipts to the Utah economy during 2002.

Owners in businesses with no employees are typically what we call "self-employed." This information originates from the annual business tax forms filed with the Internal Revenue Service (IRS). These businesses may be run by one or more persons, can range from home-based businesses to corner stores or construction contractors, and often are part-time ventures with owners operating more than one business at a time.

What Industries Are These "Non-Employers" Concentrated In?

Over 60 percent, 92,000, of these 140,000 owner-only businesses are concentrated in just five of 18 industry sectors. The largest concentration was in professional, scientific, and technical services, which covers a wide variety of activity, as the name implies. Another 20,200 persons/businesses filed tax reports in the real estate and rental and leasing industry. Virtually all of the activity in this group is for real estate agents (18,900). The "other services" industry, which has over 19,000 businesses reporting, was made up of enterprises involved with repair (auto) and personal care services (beauty and nail salons). The last two industries with high numbers of non-employee business are construction (specific skilled trades self-employed workers), which accounts for 10 percent of the total or 15,000 businesses, and sales workers that are not on payrolls (15,800).

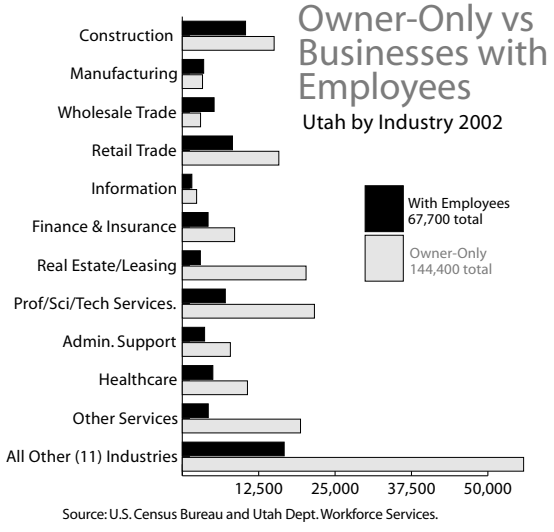
Comparing Owner-Only v. Businesses with Employees

Business owners with no employees (the self-employed), although active in all industries, are concentrated in a few. The accompanying chart compares businesses with no employees to businesses with employees by major industry sector for 2002. Apparent from the chart are concentrations of business owners with no employees (to a large extent the self-employed) concentrated in construction, sales, real estate professional/scientific, technical services, and other services.

Muddying the waters further is that business owners operating businesses with no employees may themselves be employees on some other company's payroll. In fact, one person may have many businesses, and be counted multiple times – one tax form filed for each of the businesses he/she owns.

Is Utah Like the Nation in the Type of Owner-Only Businesses?

The answer is "yes and no." Figures. Although Utah is very much like the nation in many of the industries, it is different in a few (see chart). Namely, the nation has a measurably higher concentration in construction, administrative support, and healthcare. Utah exceeds the national share in retail trade, finance and insurance, real estate, and professional, scientific and technical services. Utah is significantly higher in real estate with an owner-only proportion of 14.0 percent compared to the national average of only 10.7 percent. What that means is Utah has a whole lot more real estate agents for its population than does the nation.



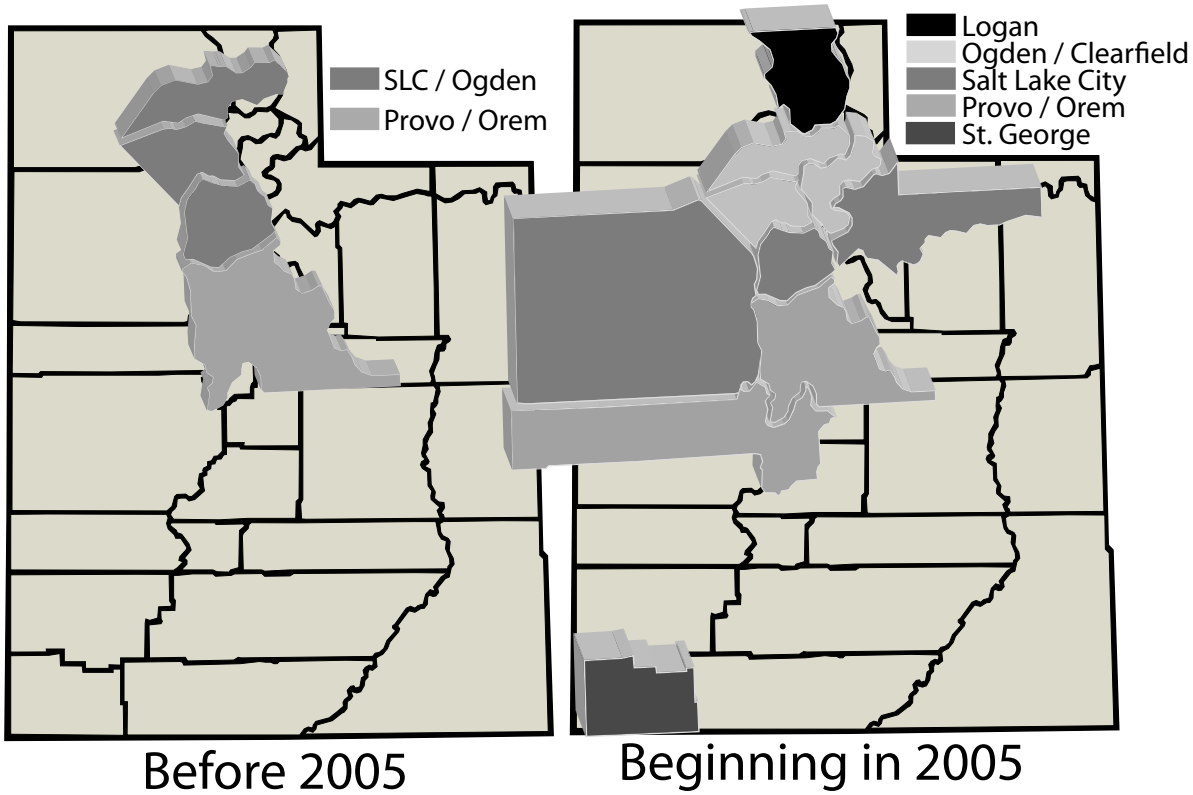
For more information on Non-Employer Businesses visit this Census link:

http://www.census.gov/epcd/nonemployer/index.html

Utah's Metropolitan Areas Redefined in 2005

by Tarie Cespedes

Metropolitan Areas in Utah



Source: Utah Department of Workforces Services, Workforce Information

If you just received your degree or are looking for a new job in the improving Utah economy, you might be interested in job growth rates close to where you live. If that is the case, or if you are simply interested in current employment, then you will want to look for the most current data available from Utah's Current Employment Statistics (CES) program.

The program is expanding in 2005 to provide preliminary job growth data for five new metropolitan statistical areas (MSAs) throughout the state of Utah. In previous years the program provided preliminary employment data for Utah's two defined MSAs: Salt Lake-Ogden and Provo-Orem. However, beginning in 2005, the Bureau of the Census and the Bureau of Labor Statistics have redefined Utah's MSAs and will now provide statistical information for the five areas listed below, which are made up of the following counties:

The state's population rose by nearly 30 percent from 1990 to 2000, changing the dynamics of Utah. As a result these five new metropolitan areas were designated after the 2000 Census. Previously there was insufficient employer data in these areas to permit us to report preliminary job growth data for Washington and Cache counties.

Beginning in 2005, if you want to know how many people work in the construction industry in the new St. George MSA, or you are curious about how many were employed in retail trade during the holiday season in the Ogden-Clearfield MSA, you will now be able to access that information.

So remember, when you are looking for the most current employment trends data for Utah's metropolitan areas, we recommend you take a look at the nonagricultural employment data at http://jobs.utah.gov/wi/pubs/UnE/.

MSA	Counties included in the MSA
Logan	Cache, UT and Franklin, ID
Ogden-Clearfield	Weber, Davis, Morgan
Salt Lake	Salt Lake, Tooele, Summit
Provo-Orem	Utah, Juab
Washington	St. George

The Other Utah

Off the Wasatch Front

Rural parts of the state must upgrade the skills of their workforce in order to compete and prosper.

by Michael Hanni

How many microprocessor design engineers are there in Emery County? Not many, but so what? Well, maybe rural Utah doesn't need more of them, but as the national economy becomes more knowledge-intensive, rural parts of the state must upgrade the skills of their workforce in order to compete and prosper.

This transition to the "New Economy" requires a diverse and deep skills base to provide the raw inputs to fuel its growth. For rural areas this means a move away from traditional industries that relied on large numbers of low-skill labor to industries that are more skills-intensive, such as healthcare and professional services.

Breaking with tradition can be tough, but the data indicates that rural American and Utah's nonmetro counties are making their move. The USDA's Economic Research Service has studied the increased skill-intensity of employment in rural America in detail. Their analysis revealed that between 1980 and 2000 the share of low-skill employment for the nation as a whole dropped from 43.4 percent to 35.5 percent. During the same period, rural America's share of low-skill employment dipped from 49.4 percent to 42.2 percent.

These are encouraging numbers as higher-skill jobs, on average, have better pay, benefits, and stability than their low-skill counterparts. Furthermore, employees that can wield skills learned in applied technology and higher education are likely to be more productive, increasing their company's competitiveness in the global market.

Getting closer to home, employment data from Utah's nonmetro-interior counties – Beaver, Carbon, Daggett, Duchesne, Emery, Garfield, Grand, Juab, Millard, Piute, Rich, San Juan, Sanpete, Sevier, Uintah, Wayne – shows clearly how this skills transition picked up steam in the 1990s. During that decade, business and professional services (+154%), healthcare and private education (+68%), and financial services (+26%) all saw solid job increases, while mining – a traditional industry in rural Utah, undergoing its own technological revolution – posted a 7 percent decline.

Educational attainment data from the 1990s reinforces the claim of increased demand for skilled-labor. Based on Census data for people aged 25 years or older, the nonmetro counties saw increases in the number of residents with higher education. Also encouraging, the number of residents with less than a ninth grade education fell sharply. These numbers reflect two realities: increased demand for skilled labor by industry, and the fruits of investment in higher education infrastructure in the area.

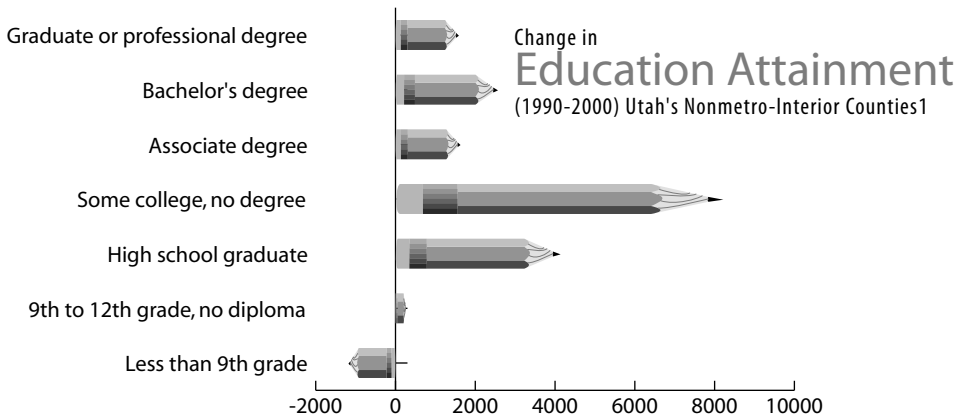
For Utah's rural counties to compete in an increasingly competitive global market, they will need to continue to invest in education programs and educational infrastructure. These investments need to be made even if rural students later leave to find work elsewhere. Those who stay will deepen their community's skill base – an enticement for businesses looking to relocate or start up. For those who choose to leave, we will have the satisfaction of knowing that we provided them with the tools they need fir their long-term success, a very noble undertaking indeed.

Links:

Low-skill to High-skill Rural Employment, Economic Research Service (USDA): http://www.ers.usda.gov/AmberWaves/November04/Features/lowskilljobs.htm

County-level Economic Data (DWS):

http://jobs.utah.gov/wi/Regions/County.asp



1. Census Data specifically excludes vocational education programs/participants from educational attainment statistics.

Source: US Census Bureau

Size of Firms *in Utah*

by Gilda Robertson and Mark Knold

Every year the Utah Department of Workforce Services publishes a report profiling the size of the firms that operate within the state. This isn't the size of their buildings or even the amount of sales receipts. Instead, it is the size of employment within those companies. After all, it's the availability of employment that keeps most of us fed.

Both firm size and establishment size are recorded, and establishment size is also reported within each county. What's the difference between a firm and an establishment? An example helps in clarification. There are many 7-Eleven convenience stores in Utah. Each store is classified as an establishment, whereas all the stores together as part of the 7-Eleven corporation are one firm.

You may have heard through the media or other source the comment that "small businesses provide most of the jobs in America." That's not an incorrect statement, but it can be misleading, because its validity boils

down to the definition of a small business. The Small Business Administration generally classifies a small business as one that employs fewer than 500 workers. That definition might work well for the nation as a whole, with large automobile, airline, and oil companies as some examples of American behemoths. But it doesn't seem to carry a practical value in Utah (or Wyoming, South Dakota, or Arkansas for that matter). Is less than 500 employees what you had in mind as a definition of a small business?

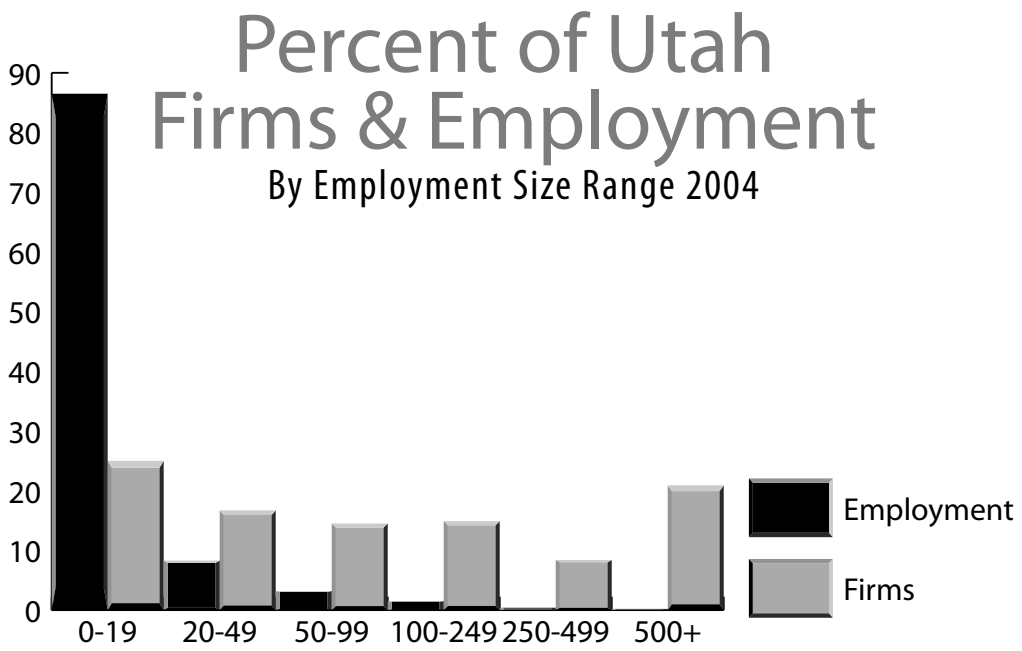
If you're comfortable with that definition, then the quoted statement is correct. But if you were thinking of something smaller, that changes the perspective—especially here in Utah.

For example, if we use the less-than-500 threshold, then here in Utah 99.6 percent of all firms qualify, and they employ 59.4 percent of Utah's roughly 1.086 million workers. Did you catch the significance of that? How about if we state it from the opposite perspective? Less than 1 percent of all Utah firms employ 40 percent of the entire workforce. That says a lot for the influence, and importance, of the large firm.

What if we changed the threshold of a small business from less-than-500 to say, less-than-100? How does Utah look then? With that criterion, 97.6 percent of Utah's firms qualify. Not much of a difference from the less-than-500 definition. But look at the employment. Under this new criterion, those 97.6 percent employ only 41.9 percent of all workers. The over-100 crowd (2.4 percent) employs the remaining 58.1 percent. If we use that criterion, then the above quotation loses its value.

One can keep playing with the numbers and change the definition of a small business. I'm not advocating making it four employees or less, but if I did, that would encompass nearly 62 percent of all Utah firms. They would employ only 5 percent of the workforce. The point is that most of the firms in Utah are very small. Utah is not unique in this situation—you will find this same characteristic across the entire United States.

http://jobs.utah.gov/wi/pubs/EM/UEEWS/firmsize.asp?URL=pubs%2FEM%2FUEEWS%2Ffirmsize.asp



Source: Department of Workforce Services, Workforce Information

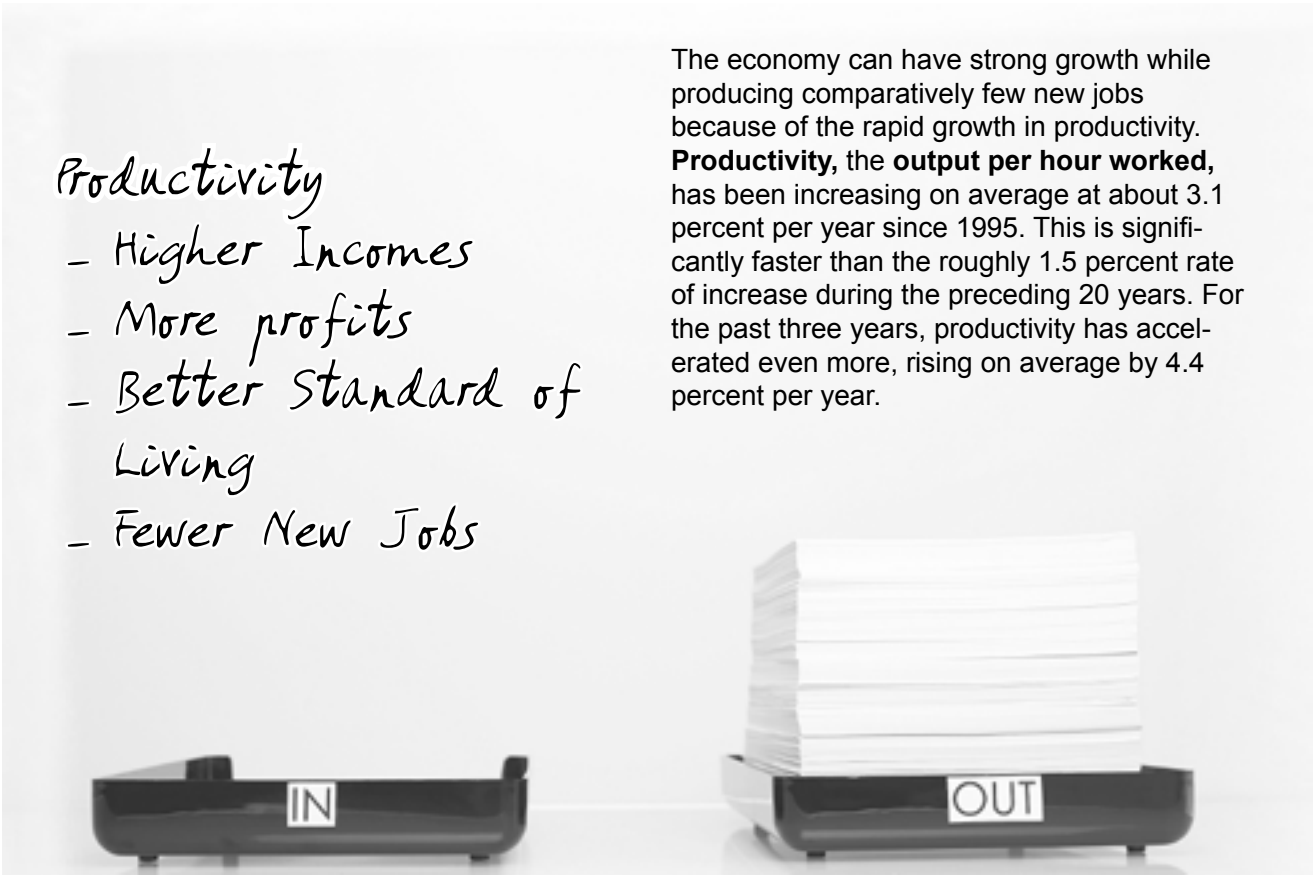
National News

Productivity

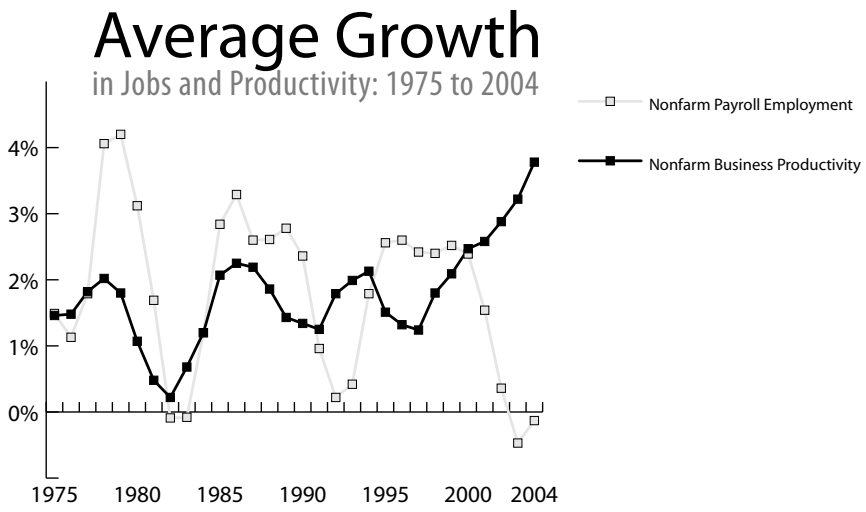
by Jim Robson

The U.S. economy has been expanding quite nicely for the past three years, while the number of new jobs – as measured by non-farm payroll employment – has been anemic. In 2004, the economy grew about 4.4 percent as measured by the output of goods and services, or Gross Domestic Product (GDP). Average employment in 2004 rose one percent.

The economy can have strong growth while producing comparatively few new jobs because of the rapid growth in productivity. **Productivity,** the **output per hour worked,** has been increasing on average at about 3.1 percent per year since 1995. This is significantly faster than the roughly 1.5 percent rate of increase during the preceding 20 years. For the past three years, productivity has accelerated even more, rising on average by 4.4 percent per year.



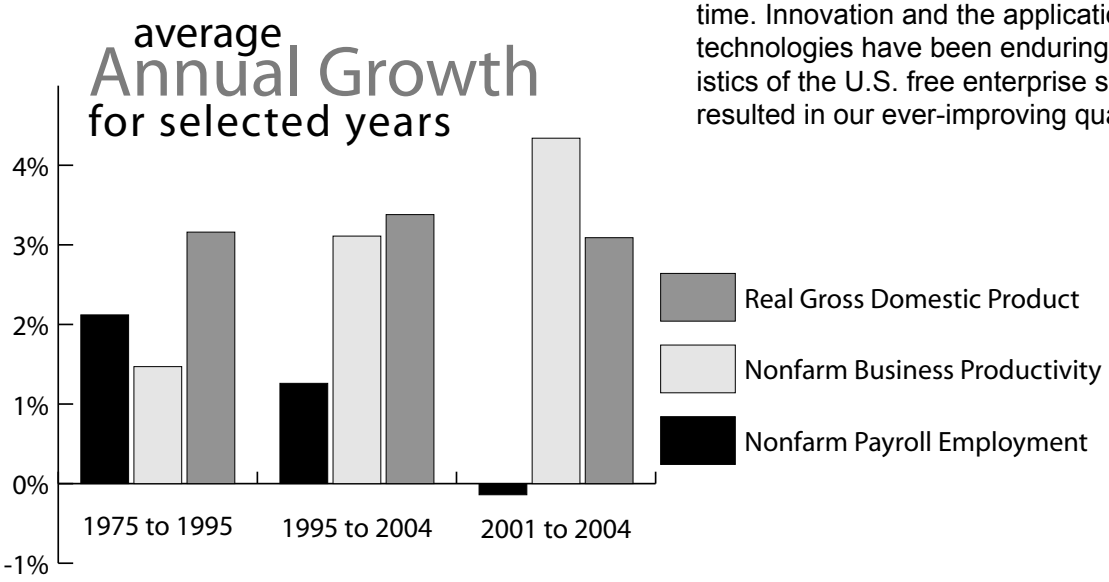
Businesses under considerable competitive pressure have been reluctant to raise prices in recent years. So, in order to generate new earnings and profits, businesses have cut costs while continuing to meet the demand for their goods and services. By investing in new technology, reorganizing work, reallocating resources, applying existing technology, equipment, and facilities more effectively and squeezing more out of the existing labor force, businesses have been able to increase production while hiring relatively few new workers.



Greater efficiency has lifted profits and enabled workers to continue to receive pay increases without the need to raise prices. Workers' increasing incomes have been an important factor in keeping the economy moving forward as consumers maintain their spending.

During 2004, productivity growth has moderated and employment growth has strengthened, while the economy continues to expand. As 2005 begins, the outlook for the U.S. economy is for continued healthy growth, with GDP expanding between 3 to 4 percent, and with job growth increasing between 1.5 to 2 percent. Consumers and businesses are being supported by low interest rates, moderate inflation, new investments, and increases in employment. These factors, combined with a more moderate pace of productivity growth, should enable the economy to expand while providing new employment opportunities for workers.

Increasing output of goods and services per hour of work – productivity – is of course, why our standard of living increases over time. Innovation and the application of new technologies have been enduring characteristics of the U.S. free enterprise system and resulted in our ever-improving quality of life.



Source: U.S. Bureau of Labor Statistics and U.S. Bureau of Economic Analysis.

INDUSTRY PROFILE

Utah

61 Education Services

The Educational Services sector comprises establishments that provide instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities, and training centers. These establishments may be privately owned and operated for profit or not for profit, or they may be publicly owned and operated. They may also offer food and accommodation services to their students.

Educational Services are a large segment of the Utah economy, representing 10.7 percent of all employment. The vast majority of educational employment is within governments, who constitute 78 percent of all education jobs. Education has an average monthly wage of $2,168, 14 percent lower than the statewide average for all industries.

2002	Employment	Wage*
Total	**114,630**	**$2,168**
Public Education	**89,257**	**$2,261**
Private Education	**25,373**	**$1,843**
Elementary and Secondary Schools	62,163	$2,152
Junior Colleges	5,497	$1,592
Colleges and Universities	41,762	$2,278
Business, Computer, and Management Training	1,640	$3,291
Technical and Trade Schools	1,617	$1,883
Others Schools and Instruction	1,716	$1,012
Educational Support Services	236	$3,021

* Average monthly wage

Largest Employers

Brigham Young University
University of Utah
Granite School District
Jordan School District
Davis County School District
Utah State University
Alpine School District
Salt Lake City School District
Weber County School District
Weber State University
Utah Valley State College
Salt Lake Community College
Nebo School District
Provo City School District
Washington County School District
Ogden City School District

NAICS North American Industry Classification System

Education Services

INDUSTRY HISTORY

ear	Employment	Avg. Wage+	% of Utah Avg. Wage	# of Establish.	Payrolls	Emp.% of State Total	Payroll % of State Total
000	109,985	$2,013	83.8	1,518	$2,657.4 M	10.2	8.6
001	114,289	$2,096	84.9	1,568	$2,874.1 M	10.6	9.0
002	114,630	$2,1668	86.4	1,612	$2,982.7 M	10.7	9.2

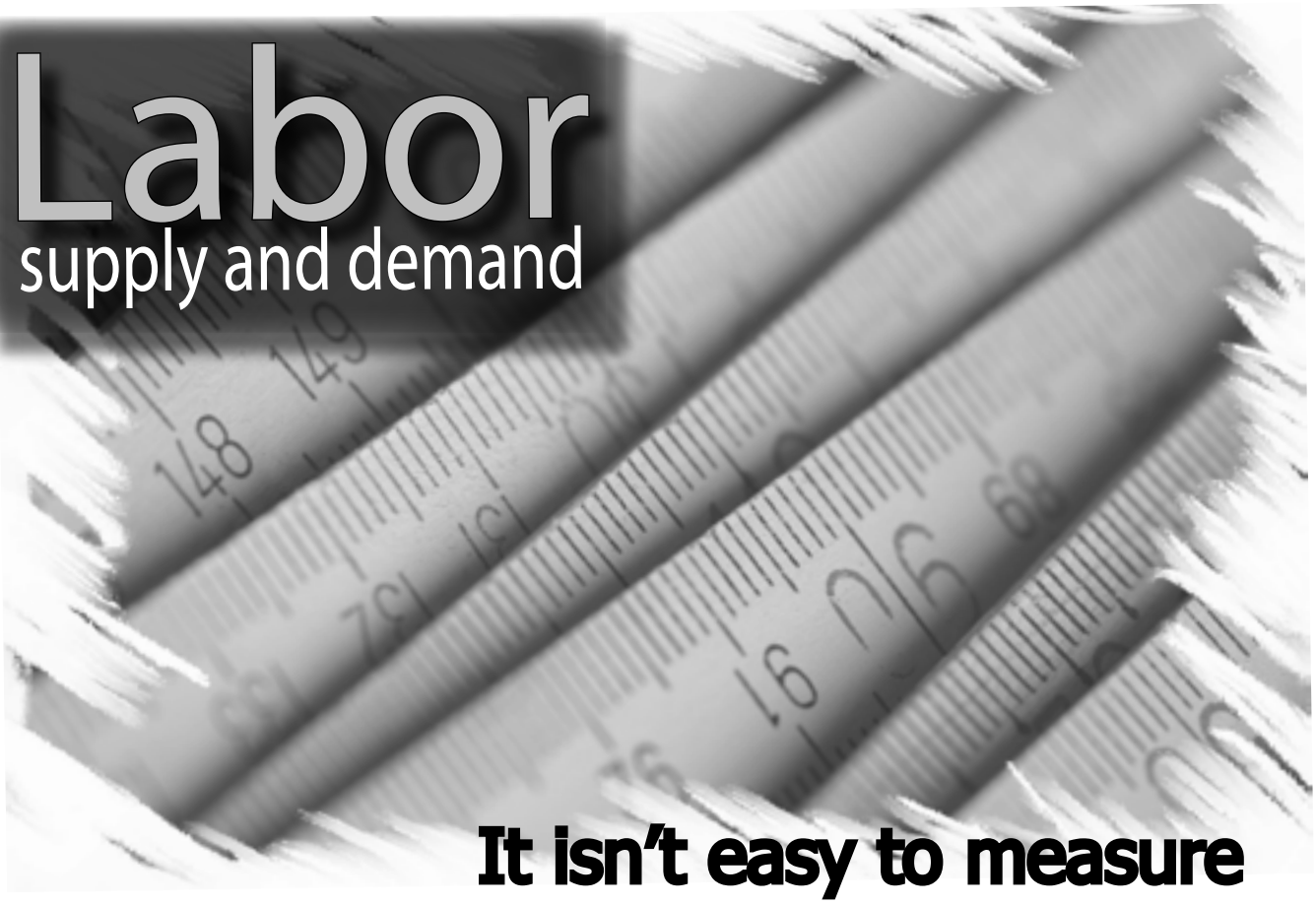
+ Average Monthly Wage

COUNTY PROFILES

County	Education Employment	% of State Educ. Emp.	Education % of County Total Emp.	Largest Education Employer
Salt Lake	41,955	36.6	7.9	University of Utah
Utah	30,978	27.0	20.4	Brigham Young University
Weber	8,697	7.6	10.0	Weber County School District
Cache	7,655	6.7	17.8	Utah State University
Davis	6,954	6.1	7.8	Davis County School District
Washington	3,230	2.8	8.6	Washington School District
Iron	2,487	2.2	17.6	Southern Utah University
Sanpete	1,612	1.4	23.8	Snow College
Box Elder	1,391	1.2	7.9	Box Elder School District
Carbon	1,206	1.1	13.5	Carbon County School District

Utah Department of Workforce Services
Economic and Data Collection and Analysis Unit
http://wi.dws.state.ut.us

Labor
supply and demand



It isn't easy to measure

We call it a labor "market" for a reason. The supply and demand for labor in the marketplace is very much like the supply and demand for any other kind of good or service.

By Lecia Parks Langston

Econ 101

Just think back to your old Economics 101 class. Remember the law of supply and demand? As the price rises, the quantity "demanded" falls while the quantity "supplied" rises. Economists like to illustrate this principle with graphs. The "demand" curve maintains a negative or declining slope and the "supply" curve generates a positive or increasing slope. (See chart.)

We're all pretty familiar with the recent effects of demand and supply on the gasoline market. As hurricanes and war cut back on oil production (or the supply) and demand increased from other countries and gas-guzzling vehicles, the price of gas at the pump shot up.

The same thing can happen in the labor market. If certain types of skills are in short supply and the demand for those skills increases, the wage rates for that occupation will rise. If the supply of workers in a particular job is abundant, don't count on it receiving high wages anytime soon.

On the Curve. . .

The supply of labor—just like the supply for other goods/services—merely indicates how willing workers are to take jobs at various wages. This will vary from worker to worker.

The demand for labor represents how much labor an employer desires at different prices (wage rates). The demand for labor by each employer will differ based on demand for the product it creates, preferences, and alternative resources.

Wage rates are determined just like the price of any other good—the intersection of the supply and demand curves indicates the "equilibrium" wage for the market—where the number of workers demanded by the employers is met by the number of workers willing to work at that wage. (See chart.) Of course, this explanation is pretty simplistic and infers no government interference in the market.

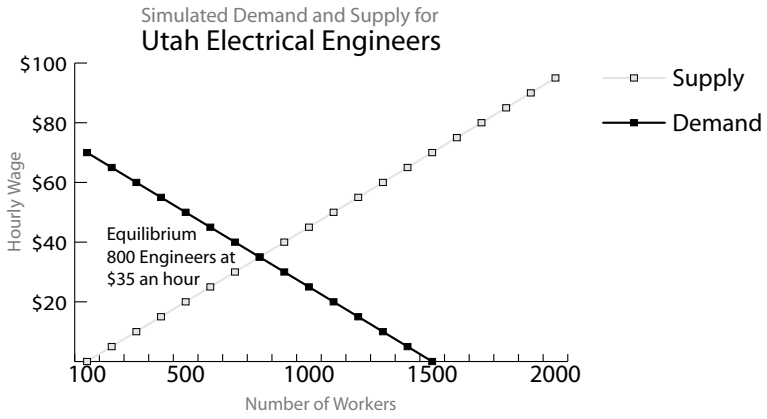
It's Not Easy. . .

Like most things economic, measuring supply and demand for labor or occupations in the real world is difficult. Demand is perhaps the easier of the two. DWS surveys measure the number of workers who are employed by occupation and industry. The number of employed workers is a fairly good indicator of how many workers employers demand at a particular wage rate.

Measuring the overall supply of workers is also quite simple. We simply measure the labor force—those at work or actively seeking work. However, when we get down to individual occupations, quantifying the supply of workers becomes much more difficult.

Supply is Tricky

Here's one reason. Right now, I work as an economist. But, given the right wages and other enticements, I can also find employment as a technical writer, a public relations person, a research analyst, a statistician, a manager, etc. And, I could also take a lot of jobs that require even fewer skills—maid, cashier, janitor, fast-food worker. In other words, given the right circumstances, I could join the supply of workers for many occupations. You see the problem.



Tales Told Out of School

One source of "supply" data comes from the number of graduates or completers of training programs. Of course, this group represents only a portion of the "supply" of workers for a given occupation. Think about all those folks who graduated in previous years—they also represent the supply of labor for a given occupation. Other training graduates may continue their education, and postpone entering the job market. Some folks just change their minds and don't want to work in their chosen field.

In addition, matching fields of study to occupations is seldom clean—particularly for the college-educated population. While some courses of study relate directly to an occupation (like nursing), many do not. In other words, there's no uncontaminated way to match a field of study with a particular job. For example, many employers are looking for college graduates regardless of their field of study.

What's another problem with these numbers—particularly on a state level? People move. Some students move to Utah to attend school with no intention of staying here for work. Just think of that big, private university in Utah County. Other long-time residents may move elsewhere to take advantage of better opportunities—eliminating themselves from Utah's labor supply.

What other measures of occupational labor supply are available? Those individuals registered with the Department of Workforce Services employment services list their areas of occupational expertise. But again, this represents just a fraction of the total supply of labor for any given occupation.

You get my point? Determining inequities in the supply and demand for labor in a particular occupation is extraordinarily difficult given current resources.

The reality is that in the "real world" with a fluid and ever-changing labor market, we don't have all the answers (or data) about labor supply and demand. However, what we do know is that the demand for occupations with higher-level skills continues to increase in this state and across the nation.

Kris Maher writing in the "Outlook" feature of the Wall Street Journal (November 22, 2004; page A2) notes, "Workers can't find jobs, and companies can't find workers. A Labor Department report released Friday on employment trends by state showed that nearly 250,000 workers in Pennsylvania were unemployed in October. Yet, according to the Pennsylvania Department of Community and Economic Development, a state agency whose business it is to attract and retain businesses, 24 percent of businesses in the state can't find enough qualified workers. The mismatch is explained by what economists call a "skills gap" that is leading to labor shortages and wage inflation—in some sectors of the economy, even as other sectors experience excess labor, which is putting downward pressures on wages in those industries."

QuickFacts

December 2004
Seasonally Adjusted
Unemployment Rates

Beaver	**4.9%**
Box Elder	**5.5%**
Cache	**3.4%**
Carbon	**5.4%**
Daggett	**3.4%**
Davis	**4.0%**
Duchesne	**6.2%**
Emery	**7.7%**
Garfield	**11.5%**
Grand	**7.7%**
Iron	**4.1%**
Juab	**5.6%**
Kane	**4.8%**
Millard	**4.7%**
Morgan	**2.9%**
Piute	**4.9%**
Rich	**3.8%**
Salt Lake	**4.4%**
San Juan	**10.5%**
Sanpete	**5.9%**
Sevier	**4.5%**
Summit	**5.4%**
Tooele	**7.2%**
Uintah	**4.6%**
Utah	**3.6%**
Wasatch	**5.2%**
Washington	**3.6%**
Wayne	**7.6%**
Weber	**5.3%**
Salt Lake-Ogden MSA	**4.5%**

Source: Utah Dept of Workforce Services

Just the Facts. . .

December 2004		***Change From Last Year***	
Utah Unemployment Rate	4.4%	▼	0.9 points
U.S. Unemployment Rate	5.4%	▼	0.3 points
Utah Nonfarm Jobs (000s)	1,129.8	▲	2.8%
U.S. Nonfarm Jobs (000s)	133,200.0	▲	1.7%
U.S. Consumer Price Index	190.3	▲	3.3%
U.S. Producer Price Index	150.1	▲	7.6%

Source: Utah Department of Workforce Services.

TrendLine

Did you know?

The days of having to wait a decade for updated census figures will soon be behind us, thanks to a new survey from the U.S. Census Bureau. The American Community Survey will provide county-level data beginning in summer 2006. For more information, see: http://www.census.gov/PressRelease/www/2004/NewsMediaKit.html

In Our Next Issue:

Theme—outlook for graduates, summer jobs for youth

Highlighted County—Iron

Industry—Accommodations & Food Services

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America's Workforce Network

DWS-03-44-0305